



PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re the Application of: Ian Robert Appelbaum
Application No.: 10/615,552
Filing Date: July 8, 2003
Title: Magneto-Luminescent Transducer
Measurement System

Docket No. 129-001
Date: April 12, 2006
Group Art Unit: 2815
Examiner: Jerome Jackson, Jr.

Information Disclosure Statement

Commissioner for Patents
PO Box 1450
Alexandria, VA 22313-1450

Sir:

Attached are IDS forms listing US patents, a US patent application, foreign patents, and papers. Copies of the foreign patents and papers are attached. A fee sheet for the IDS and a credit card form are attached. If there are any questions please call applicant's attorney at 802 864-1575.

Respectfully submitted,
For: Appelbaum, et al.

By: James M. Leas
Registration Number 34,372
Tel: (802) 864-1575

James M. Leas
37 Butler Drive
S. Burlington, Vermont 05403

CERTIFICATE OF MAILING

I hereby certify that, on the date shown below, this correspondence is being:

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Date: 4/12/06

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James M. Leas

Name

James M. Leas

Signature

129-001

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PTO/SB/17 (12-04v2)

Approved for use through 07/31/2006. OMB 0651-0032

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

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6 TRADEMA

Effective on 12/08/2004.

Fees pursuant to the Consolidated Appropriations Act, 2005 (H.R. 4818).

FEE TRANSMITTAL For FY 2005

 Applicant claims small entity status. See 37 CFR 1.27

TOTAL AMOUNT OF PAYMENT (\$)

Complete If Known

Application Number	10/615,552
Filing Date	7/8/2003
First Named Inventor	Ian Robert Appelbaum
Examiner Name	Jerome Jackson, Jr.
Art Unit	2815
Attorney Docket No.	129-001

METHOD OF PAYMENT (check all that apply)

 Check Credit Card Money Order None Other (please identify): _____

 Deposit Account Deposit Account Number: _____ Deposit Account Name: _____

For the above-identified deposit account, the Director is hereby authorized to: (check all that apply)

 Charge fee(s) indicated below Charge fee(s) indicated below, except for the filing fee

 Charge any additional fee(s) or underpayments of fee(s) under 37 CFR 1.16 and 1.17 Credit any overpayments

WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038.

FEE CALCULATION

1. BASIC FILING, SEARCH, AND EXAMINATION FEES

Application Type	FILING FEES		SEARCH FEES		EXAMINATION FEES		
	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fee (\$)	Small Entity	Fees Paid (\$)
Utility	300	150	500	250	200	100	_____
Design	200	100	100	50	130	65	_____
Plant	200	100	300	150	160	80	_____
Reissue	300	150	500	250	600	300	_____
Provisional	200	100	0	0	0	0	_____

2. EXCESS CLAIM FEES

Fee Description

Each claim over 20 (including Reissues)

Fee (\$)	Small Entity
50	25
200	100
360	180

Each independent claim over 3 (including Reissues)

Multiple dependent claims

Total Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	Multiple Dependent Claims
- 20 or HP =	x	=		Fee (\$)

HP = highest number of total claims paid for, if greater than 20.

Indep. Claims	Extra Claims	Fee (\$)	Fee Paid (\$)	
- 3 or HP =	x	=		Fee (\$)

HP = highest number of independent claims paid for, if greater than 3.

3. APPLICATION SIZE FEE

If the specification and drawings exceed 100 sheets of paper (excluding electronically filed sequence or computer listings under 37 CFR 1.52(e)), the application size fee due is \$250 (\$125 for small entity) for each additional 50 sheets or fraction thereof. See 35 U.S.C. 41(a)(1)(G) and 37 CFR 1.16(s).

Total Sheets	Extra Sheets	Number of each additional 50 or fraction thereof	Fee (\$)	Fee Paid (\$)
- 100 =	/ 50 =	(round up to a whole number) x	=	

4. OTHER FEE(S)

Non-English Specification, \$130 fee (no small entity discount)

Other (e.g., late filing surcharge): I DS

Fees Paid (\$)

\$180.00

SUBMITTED BY

Signature	<u>James Marc Lees</u>	Registration No. (Attorney/Agent) 34372	Telephone 802861571
Name (Print/Type)	<u>James Marc Lees</u>		Date 4/17/06

This collection of information is required by 37 CFR 1.136. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 30 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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Substitute for form 1449/PTO



INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Sheet

of

3

Complete if Known

Application Number	10/615,552
Filing Date	07/08/2003
First Named Inventor	Ian Robert Appelbaum
Art Unit	2815
Examiner Name	Jerome Jackson, Jr.

Attorney Docket Number 129-001

U. S. PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Document Number Number-Kind Code ² (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
		US- 6154475	11/28/2000	Soref	
		US- 6031273	2/29/2000	Torok	
		US- 5973334	10/26/1999	Mizushima	
		US- 5432373	7/11/1995	Johnson	
		US- 5334854	8/2/1994	Ono	
		US- 5079774	1/7/1992	Mendez	
		US- 4800415	1/24/1989	Simmons	
		US- 4710936	12/1/1987	Shibata	
		US- 4473834	9/25/1984	Sociof	
		US- 2002/0085332	7/4/2002	Ide	
		US- 6340826	1/22/2002	Iliadis	
		US- 6493196	12/10/2002	Noma	
		US-			

FOREIGN PATENT DOCUMENTS

Examiner Initials*	Cite No. ¹	Foreign Patent Document Country Code ³ -Number ⁴ -Kind Code ⁵ (<i>if known</i>)	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear	T ⁶
		JP61270885A	12/1/1986	Mori		
		DE3225630A1	1/12/1984	Preissner		
		JP06-163983	6/10/1994	Jiee Kee Towainamu		
		JP01-185968	07/25/1989	Yamada Toshishige		
		JP61-231788	10/16/1986	Mori Yoshihiro		

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. ¹Applicant's unique citation designation number (optional). ²See Kinds Codes of USPTO Patent Documents at www.uspto.gov or MPEP 901.04. ³Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. ⁶Applicant is to place a check mark here if English language Translation is attached.

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Substitute for form 1449/PTO				Complete if Known	
				Application Number	10/615,552
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				Art Unit	2815
				Examiner Name	Jerome Jackson, Jr.
Sheet	2	of	3	Attorney Docket Number	129-001

NON PATENT LITERATURE DOCUMENTS

Examiner Initials*	Cite No. ¹	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T ²
		MONSMA, DJ, et al, Perpendicular Hot Electron Spin-Valve Effect in a New Magnetic Field Sensor: The Spin Valve Transistor, Physical Review Letters, Vol 74, no. 26 6/26/95	
		MARCO MASTRAPASQUA, et al, Light emitting charge injection transistor with p-type collector, Appl. Phys. Lett. 60 (19), 11 May 1992	
		MARCO MASTRAPASQUA, et al, Light emitting Transistor Based on Real-Space Transfer: Electrical and Optical Properties, IEEE Trans on Elect. Dev. vol 40, No. 2, Feb 1993	
		G.L. BELENKY et al, Collector-up light-emitting charge injection transistors in n-InGaAs /InAlAs/p-InGaAs and n-InGaAs/InP/p-InGaAs heterostructures, J.Appl.Phys.73(12) 6/15/93	
		J. GENOE, pnp resonant tunneling light emitting transistor, Appl. Phys. Lett. 61 (9) 31 August 1992	
		LUDMILA BAKUEVA et al, Multi-layer contacts for organic light-emitting diodes w/ enhanced injection effic., Organic optoelectronic Materials, MRS, SC Moss, Ed, v. 708, 2002	
		YIPING HE et al, Hybrid magnetic tunnel junction/vertical cavity surface emitting laser field sensor device, Electronics Letters, 11/22/01 vol. 37, no. 24	
		X. JIANG, et al, Optical Detection of Hot-Electron Spin Injection into GaAs from a Magnetic Tunnel Transistor Source, Phys Rev Let., V 90, No. 25, 27 June 2003	
		IAN APPELBAUM et al, Ballistic electron emission luminescece, Applied Physics Letters, Vol 82, No. 25, 23 June 2003	
		IAN APPELBAUM et al, Experimental test of the planar tunneling model for ballistic electron emission spectroscopy, Physical Review B 67 155307 (2003) 10 April 2003	

Examiner Signature	Date Considered
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*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

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				Examiner Name	Jerome Jackson, Jr.
Sheet	3	of	3	Attorney Docket Number	129-001

NON PATENT LITERATURE DOCUMENTS

Examiner Signature _____ **Date Considered** _____

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